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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,172	07/31/2003	James Michael McArdle	AUS920030382US1	1419
45993 7590 06/04/2007 IBM CORPORATION (RHF) C/O ROBERT H. FRANTZ P. O. BOX 23324 OKLAHOMA CITY, OK 73123			EXAMINER HOFFLER, RAHEEM	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 06/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/631,172

Applicant(s)

MCARDLE, JAMES MICHAEL

Examiner

Raheem Hoffer

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 10-18 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/31/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Examiner Remarks

Due to Applicant's response to Election/Restriction filed 9 April 2007, Applicant wishes to elect Group I, Claims 1-5, 10-14, and 15-18, for examination in the present patent application. Claims 6-9 have been withdrawn from consideration and will be presented in a divisional patent application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 ^{10-14 and 15-18} are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Burdick et al (USPG Pub No. 20040107203A1).

As for Claim 1, Burdick et al teaches "generating a set of cleaning attributes for each cleaned data record in a complete set of cleaned data records, said cleaning attributes reflecting which fields of each record have been modified by a cleaning operation" (see paragraph [0045] and [0057-0058]); "receiving a data feature identified by a data mining process for a subset of said complete set of cleaned data records" (see paragraph [0038], [0051]); "determining a degree of correlation of said data feature

to the modified fields of said subset of cleaned data records according to said cleaning attributes" (see paragraph [0032-0036]); "and declaring said data feature as suspect responsive to said degree of correlation exceeding a threshold" (see paragraph [0035], [0053]).

As for Claim 2, Burdick et al teaches "generating a set of bit-mapped Boolean flags to form a cleaning attributes register for each cleaned data record" (see paragraph [0057-0058]).

As for Claim 3, Burdick et al teaches "performing an operation selected from the group of appending a set of cleaning attributes to each cleaned data record, prepending a set of cleaning attributes to each cleaned data record, distributing a set of cleaning attributes to each cleaned data record, and generating a cleaning attribute table" (see paragraph [0043-0044] & [0055-0059]).

As for Claim 4, Burdick et al teaches "a step selected from the group of receiving a cluster, receiving a trend, and receiving a pattern" (see paragraph [0032-0034], [0065-0067], and [0071]).

As for Claim 5, Burdick et al teaches "comparing each record in a raw data set to each record in a cleaned data set" (see paragraph [0069-0070]).

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Claims 10-14 differ from Claims 1-5 in that claims 10-14 are computer readable medium whereas claims 1-5 are method claims. Thus, claims 10-14 are analyzed as previously discussed with respect to claims 1-5 above.

Claims 15-18 differ from Claims 1-4 in that claims 15-18 are system whereas claims 1-4 are method claims. Thus, claims 15-18 are analyzed as previously discussed with respect to claims 1-4 above.

Conclusion

The prior art made of reference and not relied upon is considered pertinent to applicant's disclosure.

Foreman et al (USPG Pub No. 20050131855A1) teaches data cleaning.

Russell et al (USPG Pub No. 20030182284A1) teaches a dynamic data mining process.

Wocke et al (USPG Pub No. 20060161814A1) teaches a method and system of data analysis using neural networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raheem Hoffler whose telephone number is (571) 270-1036. The examiner can normally be reached on 7:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RH



Raheem Hoffler